

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
22 September 2005 (22.09.2005)

PCT

(10) International Publication Number
WO 2005/088743 A1

- (51) International Patent Classification⁷: H01L 33/00 (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (21) International Application Number: PCT/SG2005/000061
- (22) International Filing Date: 1 March 2005 (01.03.2005)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data: 200401424-7 15 March 2004 (15.03.2004) SG
- (71) Applicant (for all designated States except US): TINGGI TECHNOLOGIES PRIVATE LIMITED [SG/SG]; 83 Science Park Drive, #03-01/02 The Curie, Science Park I, Singapore 118258 (SG).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): YUAN, Shu [AU/SG]; 8 Jalan Pakis, Singapore 678598 (SG). KANG, Xuejun [CN/SG]; Block 509, #11-277 West Coast Drive, Singapore 120509 (SG).
- (74) Agent: ALBAN TAY MAHTANI & DE SILVA; 39 Robinson Road, #07-01 Robinson Point, Singapore 068911 (SG).
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declaration under Rule 4.17:

— of inventorship (Rule 4.17(iv)) for US only

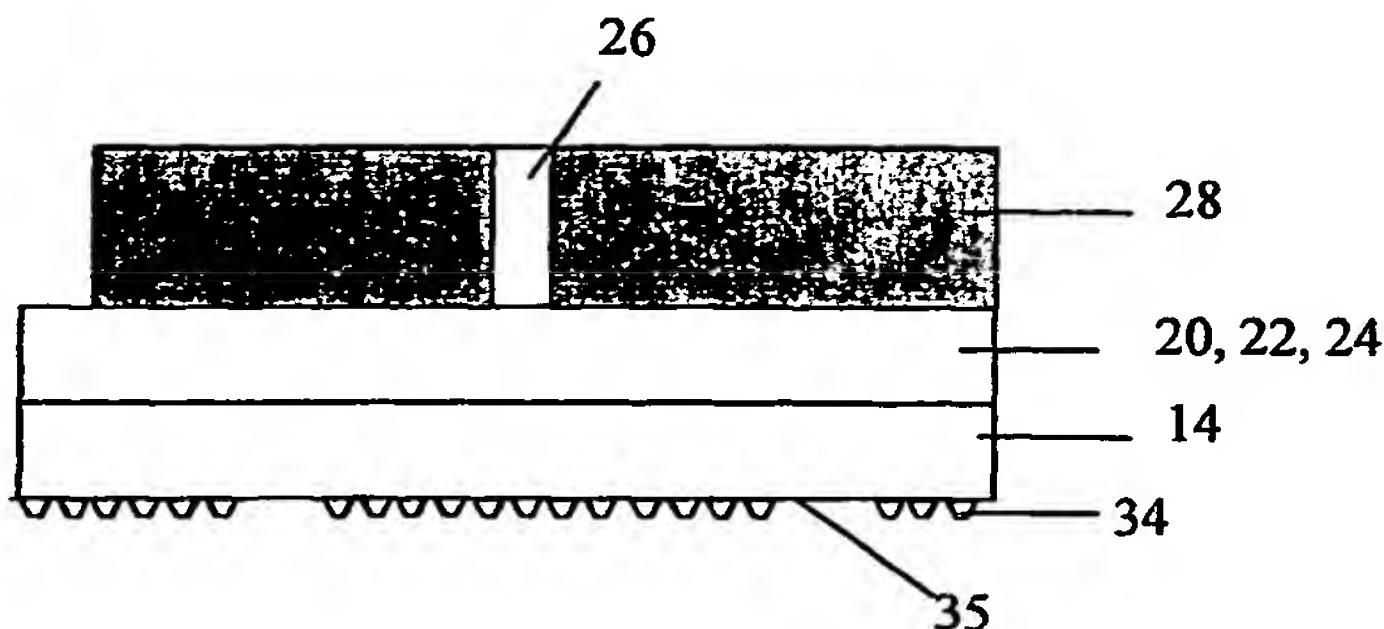
Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: FABRICATION OF SEMICONDUCTOR DEVICES

WO 2005/088743 A1



epitaxial layers. The rear surface is then textured.

(57) Abstract: A method for fabrication of a semiconductor device, the semiconductor device having a plurality of epitaxial layers on a substrate. The plurality of epitaxial layers include an active region in which light is able to be generated. The method comprises applying at least one first ohmic contact layer to a front surface of the epitaxial layer, the first ohmic contact layer also acting as a reflector. The substrate is then removed from a rear surface of the